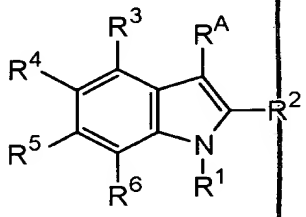
CLAIMS

1. A composition for treating or preventing ischemia reperfusion injury which contains an $sPLA_2$ inhibitor as an active ingredient.

2. A composition for treating or preventing ischemia reperfusion injury of claim 1 wherein the $sPLA_2$ inhibitor is a type-II PLA_2 inhibitor.

3. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (I):



(I)

wherein R^1 is a group selected from (a) C7 to C20 alkyl, C7 to C20 alkenyl, C7 to C20 alkynyl, carbocyclic groups, and heterocyclic groups, (b) the groups represented by (a) each substituted independently with at least one group selected from non-interfering substituents, and (c) $-(L^1)-R^7$ wherein L^1 is a divalent linking group of 1 to 18 atom(s) selected from hydrogen atom(s), nitrogen atom(s), carbon atom(s), oxygen atom(s), and sulfur atom(s), wherein the combination atoms in L^1 are selected from the group consisting of i) carbon and hydrogen only, ii) sulfur only, iii) oxygen only, iv) nitrogen and hydrogen only, v) carbon, hydrogen, and sulfur only, and vi) carbon, hydrogen, and oxygen only and R^7 is a group selected from the groups (a) and (b);

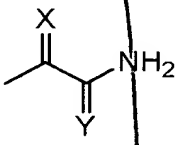
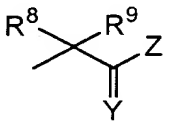
R^2 is hydrogen atom, halogen, C1 to C3 alkyl, C3 to C4 cycloalkyl, C3 to C4 cycloalkenyl, C1 to C3 alkyloxy, or C1 to C3 alkylthio;

R^3 and R^4 are each independently hydrogen atom, non-interfering substituents, or $-(L^2)-$(acidic group) wherein L^2 is an acid linker having an acid linker length of 1 to 5, provided that one of R^3 and R^4 is $-(L^2)-$(acidic group);

R^5 and R^6 are each independently hydrogen atom, non-interfering substituents,

carbocyclic groups, carbocyclic groups substituted with a non-interfering substituent(s), heterocyclic groups, or heterocyclic groups substituted with a non-interfering substituent(s); and

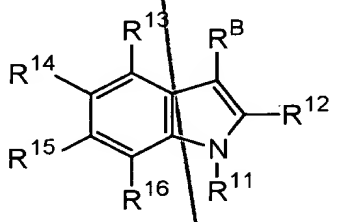
R^A is a group represented by the formula:

or

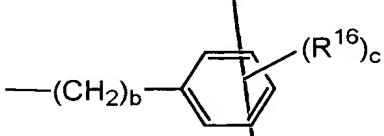
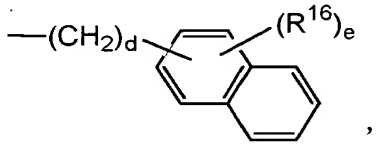
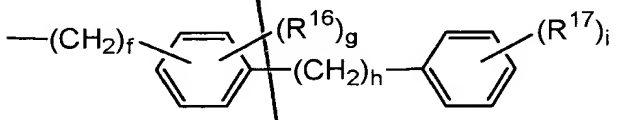
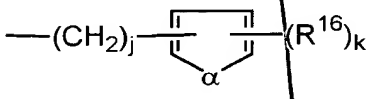
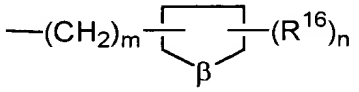
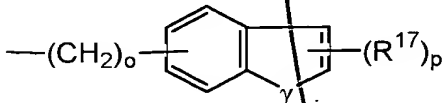
wherein R^8 and R^9 are each independently hydrogen atom, C1 to C3 alkyl or halogen; X and Y are each independently oxygen atom or sulfur atom; and Z is $-NH_2$ or $-NHNH_2$; the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

4. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (II):



(II)

wherein R^{11} is $-(CH_2)_a-R^{10}$ wherein a is an integer from 1 to 6 and R^{10} is a group represented by the formula:

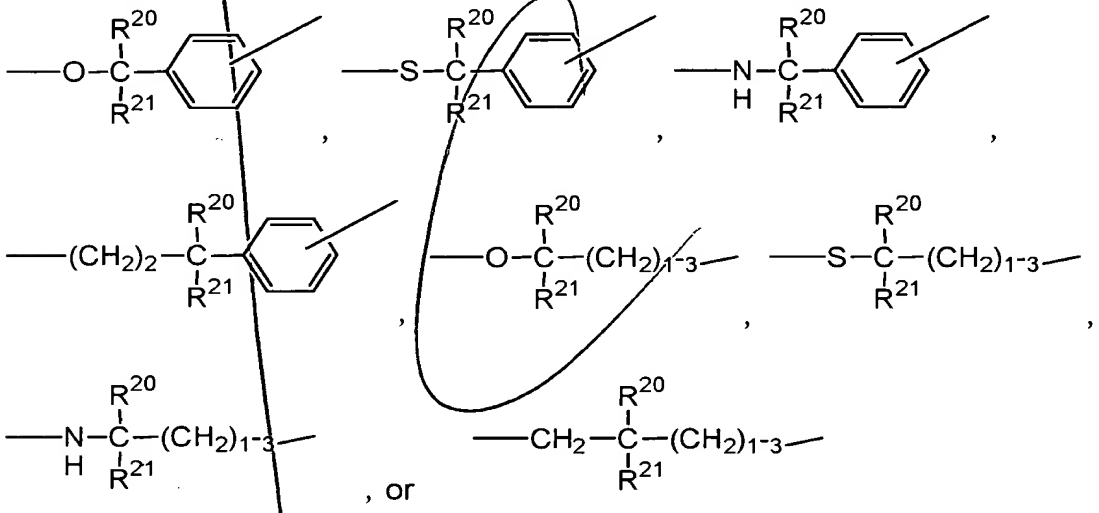

,

,

,

,

, or

.

wherein b, d, f, h, j, m, and o are each independently an integer from 0 to 2, R^{16} and R^{17} are each independently halogen, C1 to C10 alkyl, C1 to C10 alkyloxy, C1 to C10 alkylthio, phenyl, or C1 to C10 haloalkyl, α is oxygen atom or sulfur atom, β is $-CH_2-$ or $-(CH_2)_2-$, γ is oxygen atom or sulfur atom, c, i, and p are each independently an integer from 0 to 5, e is an integer from 0 to 7, g is an integer from 0 to 4, k and n are each independently an integer from 0 to 3;

R^{12} is halogen, C1 to C3 alkyl, or C3 to C4 cycloalkyl;

R^{13} is hydrogen atom or $-(L^3)-R^{18}$ wherein L^3 is $-OCH_2-$, $-SCH_2-$, $-NHCH_2-$, $-CH_2-CH_2-$, $-O-CH(CH_3)-$ or $-O-CH(CH_2CH_2Ph)-$, R^{18} is -COOH, $-SO_3H$, or $-P(O)(OH)_2$, and Ph is phenyl;

R^{14} is hydrogen atom or $-(L^4)-R^{19}$ wherein L^4 is a group represented by the formula:

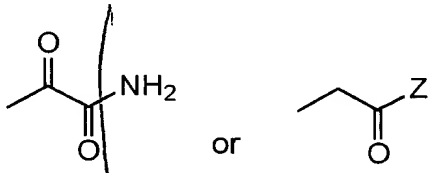


, or

wherein R^{20} and R^{21} are each independently hydrogen atom, C1 to C10 alkyl, C1 to C10 aralkyl, carboxy, alkyloxycarbonyl, or halogen, R^{19} is -COOH, $-SO_3H$, or $-P(O)(OH)_2$, provided that R^{13} and R^{14} are not hydrogen atom at the same time;

R^{15} and R^{16} are each independently hydrogen atom, C1 to C6 alkyl, aralkyl, C1 to C6 alkyloxy, C1 to C6 alkylthio, C1 to C6 hydroxyalkyl, C2 to C6 haloalkyloxy, halogen, carboxy, C1 to C6 alkyloxycarbonyl, aryloxy, arylthio, carbocyclic groups, or heterocyclic groups; and

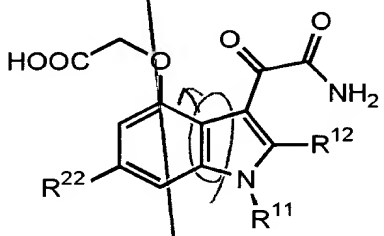
R^B is a group represented by the formula:



wherein Z is as defined above;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

5. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (III):



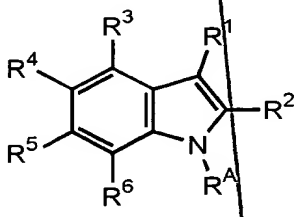
(III)

wherein R^{11} and R^{12} are as defined above;

R^{22} is hydrogen atom, C1 to C6 alkyl, carboxy, carbocyclic groups, or heterocyclic groups;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

6. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (IV):



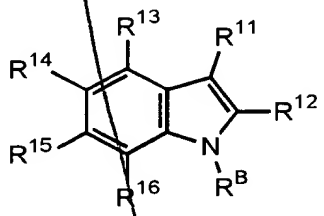
(IV)

wherein R^1, R^2, R^3, R^4, R^5, R^6, and R^A are as defined above, provided that one of R^3 and R^4 is -(L^2)-(acidic group);

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

7. A composition for treating or preventing ischemia reperfusion injury of claim 1

which contains a compound as an active ingredient, which is represented by the formula (V):

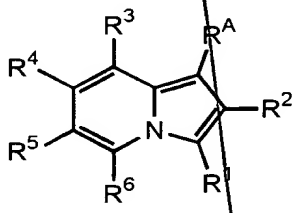


(V)

wherein R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, and R^B are as defined above, provided that R^{13} and R^{14} are not hydrogen atom at the same time;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

8. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (VI):

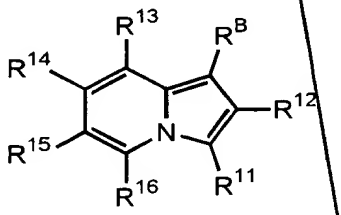


(VI)

wherein R^1, R^2, R^3, R^4, R^5, R^6, and R^A are as defined above, provided that one of R^3 and R^4 is -(L^2)-(acidic group);

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

9. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (VII):

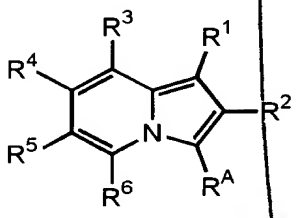


(VII)

wherein R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, and R^B are as defined above, provided that R^{13} and R^{14} are not hydrogen atom at the same time;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

10. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (VIII):

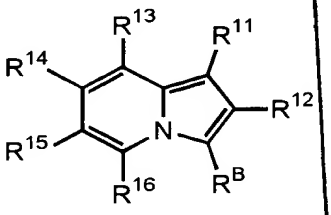


(VIII)

wherein R^1, R^2, R^3, R^4, R^5, R^6, and R^A are as defined above, provided that one of R^3 and R^4 is -(L^2)-(acidic group);

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

11. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (IX):

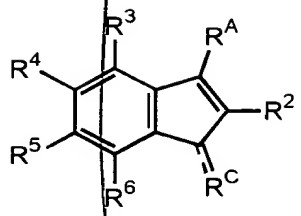


(IX)

wherein R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, and R^B are as defined above, provided that R^{13} and R^{14} are not hydrogen atom at the same time;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

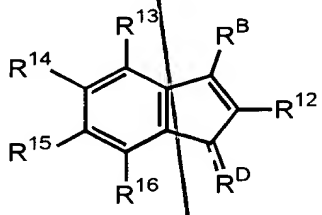
12. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (X):



(X)

wherein R^2, R^3, R^4, R^5, R^6, and R^A are as defined above, a broken line represents the presence or absence of a bond, provided that R^C is the same as defined R^1 when a broken line is absence of a bond, R^C is =CH-R^1 when a broken line is presence of a bond wherein R^1 is as defined above, and one of R^3 and R^4 is -(L^2)-(acidic group);
the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

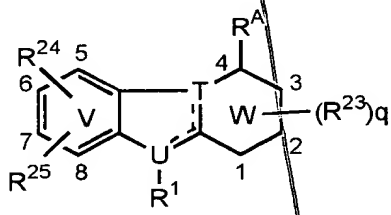
13. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XI):



(XI)

wherein R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^B, and a broken line are as defined above, provided R^D is the same as defined R^1 when a broken line is absence of a bond, R^D is =CH-$(CH_2)_{a-1}$-R^{10} when a broken line is presence of a bond wherein R^{10}, R^{11}, and a are as defined above, and R^{13} and R^{14} are not hydrogen atom at the same time;
the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

14. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XII):



(XII)

wherein R^1, R^A, and a broken line are as defined above;

R^{23} is non-interfering substituents;

R^{24} is hydroxy or $-O-(CH_2)_r-R^E$ wherein R^E is hydrogen atom, cyano, amino, carbamoyl, $-CONR^{26}R^{27}$, $-NHSO_2R^{28}$, or $-CONHSO_2R^{28}$ wherein R^{26} and R^{27} are each independently C1 to C4 alkyl or phenyl(C1 to C4 alkyl), R^{28} is phenyl substituted with carboxy or -COO(C1 to C4 alkyl), phenyl, C1 to C6 alkyl, trifluoromethyl, or $-(L^2)-$(acidic group) wherein L^2 is as defined above, and r is an integer from 1 to 5;

R^{25} is non-interfering substituents, carbocyclic groups, carbocyclic groups substituted with a non-interfering substituent(s), heterocyclic groups, and heterocyclic groups substituted by a non-interfering substituent(s);

one of T and U is nitrogen atom and the other is carbon atom;

V is benzene ring or pyridine ring wherein the nitrogen atom is at the 5-, 6-, 7-, or 8-position;

W is cyclohexene ring, benzene ring, pyridine ring wherein the nitrogen atom is at the 1-, 2-, or 3-position, or a 6-membered heterocyclic group having one heteroatom selected from the group consisting of sulfur or oxygen at the 1-, 2-, or 3- position, and nitrogen atom at the 1-, 2-, 3-, or 4-position;

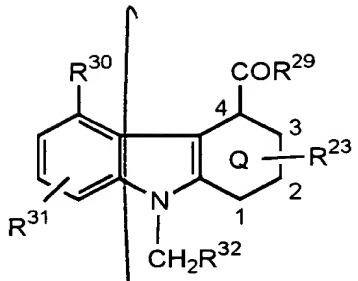
q is an integer from 1 to 3;

provided that R^{24} is not $-O-(CH_2)_tH$ wherein t is 1 or 2 when R^{25} is hydrogen atom and R^1 is benzyl; and

W is a 6-membered heterocyclic group having one heteroatom selected from the group consisting of sulfur or oxygen at the 1-, 2-, or 3- position, and nitrogen atom at the 1-, 2-, 3-, or 4-position when T is nitrogen atom;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

15. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XII):



(XII)

wherein R^{23} is as defined above;

R^{29} is $-NHNH_2$ or $-NH_2$;

R^{30} is hydroxy or $-O-(CH_2)_r-R^F$ wherein R^F is hydrogen atom, carboxy, carbamoyl, -COO(C1 to C4 alkyl), $-P(=O)(R^{33}R^{34})$ wherein R^{33} and R^{34} are each independently hydroxy or -O-(C1 to C4 alkyl), $-SO_3H$, $-SO_3$(C1 to C4 alkyl), tetrazolyl, cyano, amino, $-NHSO_2R^{35}$, or $-CONHSO_2R^{35}$ wherein R^{35} is C1 to C6 alkyl or trifluoromethyl, phenyl, or phenyl substituted with carboxy or -COO(C1 to C4 alkyl), and r is as defined above;

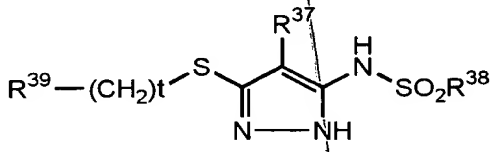
R^{31} is hydrogen atom, -O-(C1 to C4 alkyl), halogen, C1 to C6 alkyl, phenyl, (C1 to C4 alkyl)phenyl, $-CH_2OSi$(C1 to C6 alkyl), furyl, thienyl, C1 to C6 hydroxyalkyl, $-(CH_2)_sR^{36}$ wherein R^{36} is hydrogen atom, carbamoyl, $-NR^{26}NR^{27}$ wherein R^{26} and R^{27} are as defined above, cyano, or phenyl and s is an integer from 1 to 8, or phenyl substituted with C1 to C6 alkyl, halogen, or trifluoromethyl;

R^{32} is hydrogen atom, C5 to C14 alkyl, C3 to C14 cycloalkyl, pyridyl, phenyl, or phenyl substituted with C1 to C6 alkyl, halogen, trifluoromethyl, trifluoromethyloxy, C1 to C4 alkyloxy, cyano, C1 to C4 alkylthio, phenyl(C1 to C4 alkyl), (C1 to C4 alkyl) phenyl, phenyl, phenyloxy, or naphthyl; and

Q is cyclohexene ring or benzene ring;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

16. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XIII):



(XIII)

wherein R^{37} is phenyl, isoquinoline-3-yl, pyrazinyl, pyridine-2-yl, or pyridine-2-yl

substituted at 4-position with C1 to C4 alkyl, C1 to C4 alkyloxy, cyano, or -$(CH2)_{0-2}CONH_2$;

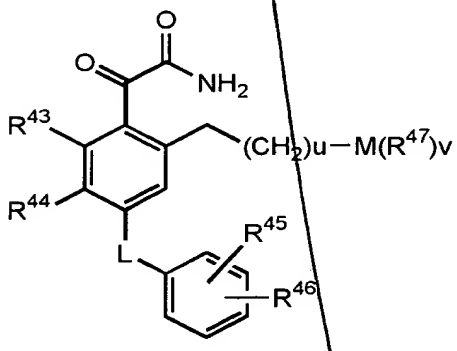
R^{38} is phenyl optionally substituted with 1 to 3 substituents selected from the group consisting of C1 to C4 alkyl, cyano, halogen, nitro, -COO(C1 to C4 alkyl) and trifluoromethyl, naphthyl, or thienyl optionally substituted with 1 to 3 halogen;

R^{39} is halogen, phenyl, phenyl(C2 to C6 alkenyl), pyridyl, naphthyl, quinolyl, (C1 to C4 alkyl)thiazolyl, phenyl substituted with one or two substituents selected from the group consisting of C1 to C4 alkyl, cyano, carbamoyl, nitro, trifluoromethyl, halogen, C1 to C4 alkyloxy, -COO(C1 to C4 alkyl), phenoxy, and $-SR^{40}$ wherein R^{40} is C1 to C4 alkyl or halophenyl, phenyl substituted with one substituent selected from the group consisting of $-O-(CH_2)_{1-3}R^{41}$ wherein R^{41} is cyano, carboxy, carbamoyl, or tetrazolyl, $-OR^{42}$ wherein R^{42} is cyclopentyl, cyclohexyl, or halogen, and phenyl substituted with C1 to C4 alkoxy or phenyl substituted with methylenedioxy; and

t is an integer from 1 to 5;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

17. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XIV):



(XIV)

wherein R^{43} and R^{44} are each independently hydrogen atom, halogen, or C1 to C4 alkyl;

R^{45} and R^{46} are each independently hydrogen atom, C1 to C4 alkyl, C1 to C4 alkyloxy, C1 to C4 alkylthio, halogen, phenyl, or phenyl substituted with halogen;

R^{47} is hydrogen atom or C1 to C4 alkyl;

M is $-CO_2-$, $-PO_3-$, or $-SO_3-$;

L is -O- or $-(CH_2)_{0-1}-$;

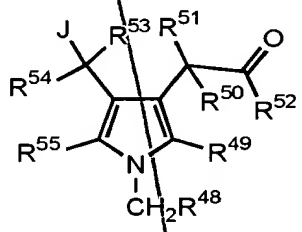
u is an integer from 1 to 8;

provided that v is 1 when M is $-CO_2-$ or $-PO_3-$;

v is 1 or 2 when M is $-SO_3-$;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

18. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XV):



(XV)

wherein R^{48} is hydrogen atom, C1 to C4 alkyl, phenyl, or phenyl substituted with one or two substituents selected from the group consisting of C1 to C4 alkyl, C1 to C4 alkyloxy, phenyl(C1 to C4 alkyl), C1 to C4 alkylthio, halogen, and phenyl;

R^{49} is hydrogen atom, C1 to C4 alkyl, halogen, C1 to C4 alkyloxy, or C1 to C4 alkylthio;

R^{50} and R^{51} are each independently halogen or R^{50} and R^{51} are taken together to form =O;

R^{52} is $-NH_2$ or $-NHNH_2$;

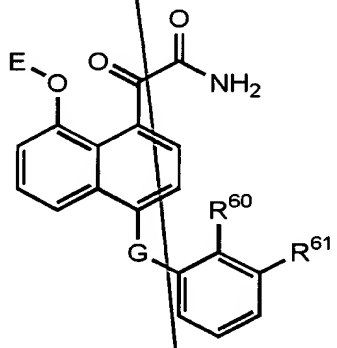
R^{53} and R^{54} are each hydrogen atom or when one of R^{53} and R^{54} is hydrogen atom, the other is C1 to C4 alkyl or $-(CH_2)_{0-4}-R^{56}$ wherein R^{56} is $-CO_2R^{57}$, $-PO_3(R^{57})_2$, $-PO_4(R57)_2$, or $-SO_3R^{57}$ wherein R^{57} is each independently C1 to C4 alkyl, or R^{53} and R^{54}, taken together, are =O or =S;

R^{55} is hydrogen atom, methyl, or ethyl; and

J is R^{58}-(C1 to C6 alkyl)-, R^{58}-(C2 to C6 alkenyl)-, or phenyl substituted at the ortho position with R^{58} wherein R^{58} is $-(CH_2)_{1-4}R^{59}$ wherein R^{59} is $-CO_2R^{57}$, $-PO_3(R^{57})$, $-PO_4(R^{57})_2$, or $-SO_3R^{57}$ wherein R^{57} is as defined above, and the above phenyl may further be substituted with one or two substituents selected from the group consisting

of hydrogen atom, C1 to C4 alkyl, halogen, and C1 to C4 alkyloxy or the above phenyl may be condensed with a phenyl to form a naphthyl group;
the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

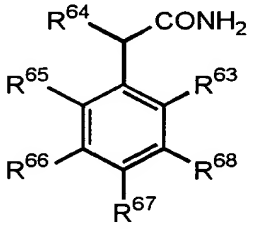
19. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XVI):



(XVI)

wherein R^{60} and R^{61} are each independently hydrogen atom or non-interfering substituents, provided that at least one of R^{60} and R^{61} is hydrogen atom;
G is $-CH_2-$ or -O-; and
E is $-(CH_2)_{1-3}R^{62}$ wherein R^{62} is an acidic group selected from $-CO_2H$, $-SO_3H$, and $-PO(OH)_2$;
the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

20. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XVII):

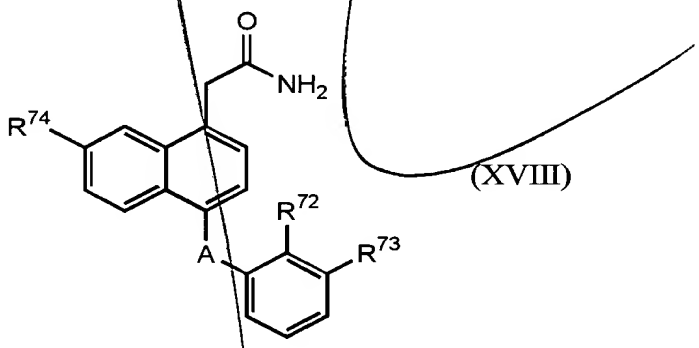


(XVII)

wherein R^{63} is hydrogen atom or $-O-(CH_2)_{1-8}R^{69}$ wherein R^{69} is $-CO_2R^{70}$, $-PO_3(R^{70})_2$, or $-SO_3R^{70}$ wherein R^{70} is each independently hydrogen atom or C1 to C4 alkyl;
R^{64} is hydrogen atom or hydroxy;

R^{65} and R^{66} are each independently hydrogen atom, halogen, or C1 to C4 alkyl;
one of R^{67} and R^{68} is -B-R^{71} and the other is hydrogen wherein B is -O- or -CH_2-, and R^{71} is phenyl or phenyl substituted with one or two substituents selected from the group consisting of halogen, C1 to C4 alkyl, C1 to C4 alkyloxy, phenyl, and phenyl substituted with one or two halogen;
provided R^{63} is hydrogen atom when R^{68} is -B-R^{71};
R^{71} is not phenyl when R^{63}, R^{64}, R^{65}, R^{66}, and R^{68} are hydrogen atom and R^{67} is -O-R^{71};
R^{71} is not phenyl substituted with one methoxy group or two chloro groups when R^{63}, R^{64}, R^{65}, R^{66}, and R^{68} are hydrogen atom and R^{67} is -CH_2-R^{71};
the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

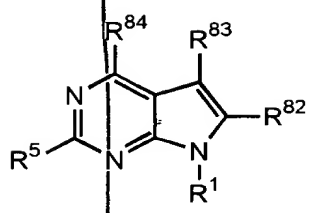
21. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XVIII):



(XVIII)

wherein R^{72} and R^{73} are each independently hydrogen atom or non-interfering substituents, provided that at least one of R^{72} and R^{73} is hydrogen atom;
R^{74} is hydrogen atom, -O-$(CH_2)_{2-4}$-R^{75}, -O-$[CH(CH_3)]_{2-4}R^{75}$, or -O-$[CH(CH_2CH_2C_6H_5)]_{2-4}$-$R^{75}$ wherein R^{75} is -CO_2H, -PO_3H_2, or -SO_3H_2; and
A is -O- or -CH_2-;
the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

22. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XIX):



(XIX)

wherein R^1 and R^5 are as defined above;

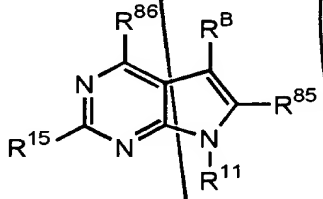
R^{82} is hydrogen atom or a group containing 1 to 4 non-hydrogen atoms with necessary hydrogen atom;

R^{83} is $-(L^5)-R^A$ wherein L^5 is a bond, $-CH_2-$, -O-, -S-, -NH-, or -C(=O) and R^A is as defined above;

R^{84} is $-(L^6)-$(acidic group) wherein L^6 is an acid linker;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

23. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XX):



(XX)

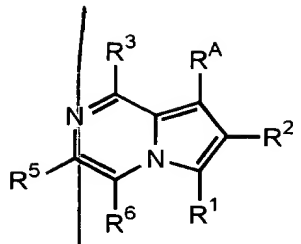
wherein R^{11}, R^{15}, and R^B are as defined above;

R^{85} is hydrogen atom, methyl, ethyl, propyl, isopropyl, cyclopropyl, C1 to C3 alkyloxy, C1 to C3 alkylthio, C1 to C3 haloalkyl, C1 to C3 hydroxyalkyl, or halogen;

R^{86} is $-(L^3)-R^{18}$ wherein L^3 and R^{18} are as defined above;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

24. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XXI):

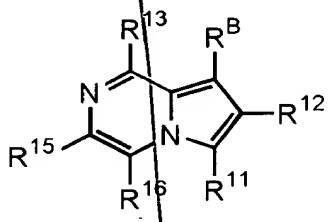


(XXI)

wherein R^1, R^2, R^3, R^5, R^6, and R^A are as defined above;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

25. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XXII):

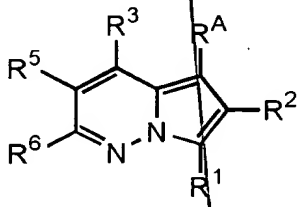


(XXII)

wherein R^{11}, R^{12}, R^{13}, R^{15}, R^{16}, and R^B are as defined above;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

26. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XXIII):

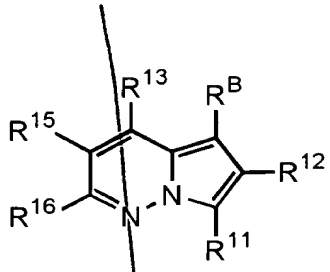


(XXIII)

wherein R^1, R^2, R^3, R^5, R^6, and R^A are as defined above;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

27. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula (XXIV):



(XXIV)

wherein R^{11}, R^{12}, R^{13}, R^{15}, R^{16}, and R^B are as defined above;

the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

28. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains, as an active ingredient, a compound selected from the group consisting of:

[3-(2-amino-1,2-dioxoethyl)-2-methyl-1-(phenylmethyl)-1H-indole-4-yl]oxy]acetic acid,

dl-2-[[3-(2-amino-1,2-dioxoethyl)-2-methyl-1-(phenylmethyl)-1H-indole-4-yl]oxy]propanoic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-([1,1'-biphenyl]-2-yl-methyl)-2-methyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-([1,1'-biphenyl]-3-yl-methyl)-2-methyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-([1,1'-biphenyl]-4-yl-methyl)-2-methyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-[(2,6-dichlorophenyl)methyl]-2-methyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-[(4-fluorophenyl)methyl]-2-methyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-2-methyl-1-[(1-naphthyl)methyl]-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-2-ethyl-1-(phenylmethyl)-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-2-ethyl-6-methyl-1-(phenylmethyl)-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-6-carboxy-2-ethyl-1-(phenylmethyl)-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-[(3-chlorophenyl)methyl]-2-ethyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-([1,1'-biphenyl]-2-yl-methyl)-2-ethyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-([1,1'-biphenyl]-2-yl-methyl)-2-propyl-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-2-cyclopropyl-1-(phenylmethyl)-1H-indole-4-yl]oxy]acetic acid,

[[3-(2-amino-1,2-dioxoethyl)-1-([1,1'-biphenyl]-2-yl-methyl)-2-cyclopropyl-1H-indole-4-yl]oxy]acetic acid,

4-[[3-(2-amino-1,2-dioxoethyl)-2-ethyl-1-(phenylmethyl)-1H-indole-5-yl]oxy]butanoic acid,

2-[[1-(2-amino-1,2-dioxoethyl)-2-ethyl-3-phenylmethyl-indolizine-8-yl]oxy]acetic acid,

2-[[1-(2-amino-1,2-dioxoethyl)-3-(2-biphenyl)methyl-2-ethylindolizine-8-yl]oxy]acetic acid,

2-[[1-(2-amino-1,2-dioxoethyl)-3-(2-biphenyl)methyl-2-cyclopropylindolizine-8-yl]oxy]acetic acid,

2-[[3-(2-amino-2-oxoethyl)-2-ethyl-1-phenylmethylene-1H-indene-4-yl]oxy]acetic acid,

2-[[3-(2-amino-2-oxoethyl)-2-ethyl-1-(1-naphthyl)methylene-1H-indene-4-yl]oxy]acetic acid,

2-[[8-(2-amino-1,2-dioxoethyl)-7-ethyl-3-methyl-6-phenylmethyl-[1,2-a]pyrazine-1-yl]oxy]acetic acid,

2-[[8-(2-amino-1,2-dioxoethyl)-7-ethyl-3-methyl-6-(2-biphenyl)methyl-[1,2-a]pyrazine-1-yl]oxy]acetic acid,

2-[[8-(2-amino-1,2-dioxoethyl)-6-cyclopropylmethyl-7-ethyl-3-methyl-[1,2-a]pyrazine-1-yl]oxy]acetic acid,

2-[[8-(2-amino-1,2-dioxoethyl)-7-ethyl-3-phenyl-6-phenylmethyl-[1,2-a]pyrazine-1-yl]oxy]acetic acid,

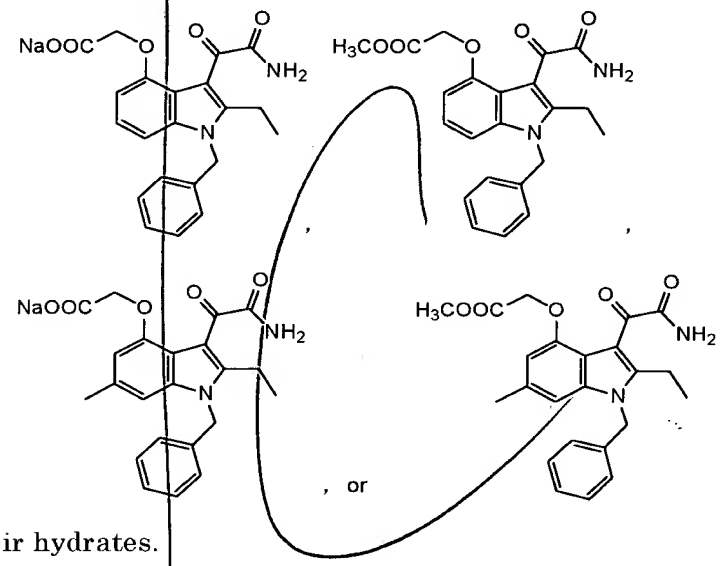
2-[[5-(2-amino-1,2-dioxoethyl)-6-ethyl-7-phenylmethyl-[1,2-b]pyridazine-4-yl]oxy]acetic acid,

2-[[5-(2-amino-1,2-dioxoethyl)-2,6-dimethyl-7-phenylmethyl-[1,2-b]pyridazine-4-yl]oxy]acetic acid,

2-[[5-(2-amino-1,2-dioxoethyl)-6-ethyl-2-phenyl-7-phenylmethyl-[1,2-b]pyridazine-4-yl]oxy]acetic acid, and

(5-carbamoyl-9-cyclohexylmethyl-9H-carbazole-4-yl-oxy)acetic acid, and the prodrugs thereof; their pharmaceutically acceptable salts; or their hydrates.

29. A composition for treating or preventing ischemia reperfusion injury of claim 1 which contains a compound as an active ingredient, which is represented by the formula:



or their hydrates.

30. A preservation solution for an organ in an ischemic condition caused by surgery or cardiac standstill, which comprises an $sPLA_2$ inhibitor.

31. A preservation solution for an organ extirpated from a donor for organ transplantation, which comprises an $sPLA_2$ inhibitor.

32. A preservation solution of claim 30 or 31, wherein the $sPLA_2$ inhibitor is type-II PLA_2 inhibitor.

33. A preservation solution of claim 30 or 31, wherein the $sPLA_2$ inhibitor is a compound of any one of claims 3 to 29.

34. A preservation solution of any one of claims 30 to 33 wherein the organ is heart, liver, pancreas, kidney, or small intestine.

35. A method for preventing ischemia reperfusion injury, which comprises administrating an $sPLA_2$ inhibitor.

36. A method for preventing ischemia reperfusion injury, which comprises administrating an $sPLA_2$ inhibitor before the occurrence of ischemia caused by surgery or cardiac standstill.

37. A method for preventing ischemia reperfusion injury for an organ in an ischemic condition caused by surgery or cardiac standstill, which comprises using a solution including an $sPLA_2$ inhibitor as a preservation solution.

38. A method for preventing ischemia reperfusion injury, which comprises administration of an $sPLA_2$ inhibitor before reperfusion of blood to an organ which is in an ischemic condition caused by surgery or cardiac standstill.

39. A method for preventing ischemia reperfusion injury, which comprises administration of an $sPLA_2$ inhibitor after reperfusion of blood to an organ which is in an ischemic condition caused by surgery or cardiac standstill.

40. A method for preventing ischemia reperfusion injury of any one of claims 35 to 39, wherein the $sPLA_2$ inhibitor is type-II PLA_2 inhibitor.

41. A method for preventing ischemia reperfusion injury of any one of claims 35 to 39, wherein the $sPLA_2$ inhibitor is a compound of any one of claims 3 to 29.

42. A method for preventing ischemia reperfusion injury of any one of claims 37 to 41 wherein the organ is heart, liver, pancreas, kidney, or small intestine.

43. A method for treating ischemia reperfusion injury, which comprises administrating an $sPLA_2$ inhibitor.

44. A method for treating ischemia reperfusion injury for an organ in an ischemic condition caused by surgery or cardiac standstill, which comprises using a solution including an $sPLA_2$ inhibitor as a preservation solution.

45. A method for treating ischemia reperfusion injury, which comprises administrating an $sPLA_2$ inhibitor before the occurrence of ischemia caused by surgery or cardiac standstill.

46. A method for preventing ischemia reperfusion injury, which comprises administrating an $sPLA_2$ inhibitor after reperfusion of blood to an organ which is in an ischemic condition caused by surgery or cardiac standstill.

47. A method for treating ischemia reperfusion injury of any one of claims 43 to 46, wherein the $sPLA_2$ inhibitor is type-II PLA_2 inhibitor.

48. A method for treating ischemia reperfusion injury of any one of claims 43 to 46, wherein the $sPLA_2$ inhibitor is a compound of any one of claims 3 to 29.

49. A method for treating ischemia reperfusion injury of any one of claims 44 to 48 wherein the organ is heart, liver, pancreas, kidney, or small intestine.

50. A preservation method for an extirpated organ which comprises using a solution including an $sPLA_2$ inhibitor as a preservation solution.

51. A preservation method of claim 50, wherein the $sPLA_2$ inhibitor is type-II PLA_2 inhibitor.

52. A preservation method of claim 50, wherein the $sPLA_2$ inhibitor is a compound of any one of claims 3 to 29.

53. A preservation method of claim 50, wherein the organ is heart, liver, pancreas, kidney, or small intestine.

54. Use of $sPLA_2$ inhibitor for the preparation of a pharmaceutical composition for treating or preventing ischemia reperfusion injury.

55. Use of type-II PLA_2 inhibitor for the preparation of a pharmaceutical composition for treating or preventing ischemia reperfusion injury.

56. Use of a compound of any one of claims 3 to 29 for the preparation of a pharmaceutical composition for treating or preventing ischemia reperfusion injury.